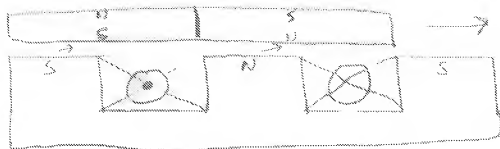
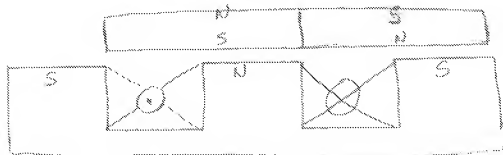


beginning of stroke

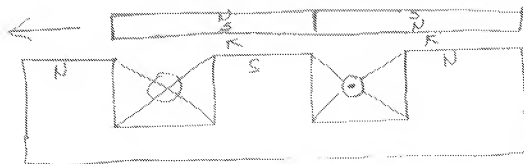


axial
net force
to right

end of stroke



beginning of stroke



axial
net force
to left



axial
net force
 $= 0$

permanent magnet width (bpw)
less than $b_g + bw$